Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-35. (cancelled)

Claim 36. (currently amended) A method for diagnosing insulin resistance by determining the presence of a biopolymer marker consisting of amino acid residues 2-25 of SEQ ID NO:1 comprising:

~~(a) obtaining a sample from a patient;~~

[[(b)]] (a) conducting mass spectrometric analysis on [[said]] a sample in a manner effective to maximize ~~elucidation of discernible~~ analysis of peptide fragments contained therein and comparing a mass spectral profile of said biopolymer marker consisting of amino acid residues 2-25 of SEQ ID NO:1 to mass spectral profiles obtained and analyzed from said sample; and

~~(c) comparing mass spectrum profiles of a peptide consisting of amino acid residues 2-25 of SEQ ID NO:1 to mass spectrum profiles of peptides elucidated from said sample; wherein recognition of a mass spectrum profile in the sample displaying the~~

~~characteristic profile of the mass spectrum profile for the peptide consisting of amino acid residues 2-15 of SEQ ID NO:1 is diagnostic for insulin resistance~~

(b) confirming the presence of said biopolymer marker consisting of amino acid residues 2-25 of SEQ ID NO:1 by identifying a mass spectral profile having an ion peak at about 2753 daltons in said sample;

wherein the presence of said biopolymer marker consisting of amino acid residues 2-25 of SEQ ID NO:1 is diagnostic for insulin resistance.

Claim 37. (currently amended) The method of claim 36, wherein [[the]] said sample is an unfractionated body fluid or a tissue sample.

Claim 38. (previously presented) The method of claim 36, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 39. (previously presented) The method of claim 36, wherein said mass spectrometric analysis is Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS).

Claim 40. (currently amended) The method of claim 36, wherein said ~~patient~~ sample is from a human.

Claim 41. (currently amended) An insulin resistance diagnostic kit comprising: (a) a peptide consisting of amino acid residues 2-25 of SEQ ID NO:1 and (b) an antibody that binds to said peptide ~~in a sample from a patient~~.

Claim 42. (previously presented) The diagnostic kit of claim 41, wherein said antibody is immobilized on a solid support.

Claim 43 (previously presented) The diagnostic kit of claim 41, wherein said antibody is labeled.